Atty. Dkt. No. AMAT/2859/MD/PVD/DV

COMBINED DECLARATION AND POWER OF ATTORNEY

		COMBINED PRODUCTION IN DISCOURT					
As a	below name	ed inventor, I hereby declare that:					
This	declaration is of the following type:						
	[X] {] []	original divisional continuation continuation-in-part					
		INVENTORSHIP IDENTIFICATION					
irs	and sole inv	est office address and citizenship are as stated below next to my name. I believe I am the original, entor (if only one name is listed below) or an original, first and joint inventor (if plural names are he subject matter which is claimed and for which a patent is sought on the invention entitled:					
		IMPROVED BARRIER LAYER FOR ELECTROPLATING PROCESSES					
		SPECIFICATION IDENTIFICATION					
Γhe	specification	of which:					
	[X] [] []	is attached hereto was filed on , under Serial No. , executed on even date herewith; or Express Mail No.(as Serial No. not yet known) and was amended on (if applicable) was described and claimed in PCT International Application No filed on and as amended under PCT Article 19 on					
	A	CKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR					
he clair	reby state thams, as amend	at I have reviewed and understand the contents of the above-identified specification, including the ed by any amendment referred to above.					
l ac	knowledge the 37, Code of	e duty to disclose all information I know to be material to patentability in accordance with Federal Regulations, §1.56,					
ike	which is ma lihood that a e as a patent,	aterial to the examination of this application; namely, information where there is a substantial reasonable Examiner would consider it important in deciding whether to allow the application to and					
	[X]	In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.					

PRIORITY CLAIM (35 U.S.C. §119)

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any foreign application(s) for patcht or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United Ste : of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

	[X]	No such a	applications have been filed	l.		
	[]	Such app	lications have been filed as	follows:		
A.		Prior foreign/PCT application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. §119				
	Cour	ntry/PCT	Application No	Date Filed	Priority Claimed	
Í					[] Yes [] No [] Yes [] No [] Yes [] No	
В.		reign applic pplication	ation(s), if any, filed more	than 12 mos. (6 mos for	design) prior to this	
	Count Applic Filing	ation No:				
			PRIORITY CI	ATM (35 II S.C. 6120)		

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the mainer provided by the first paragraph of Title 35, United States Code, \$112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

[X] []		applications have been			
Serial l	<u>No</u> .	Filing Date	Patented	Status	Abandoned

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Donald Verplancken Michael B. Binschlag Peter J. Sgarbossa Lawrence Edelman Michael L. Sherrard Raymond Kam-On Kwong James C. Wilson Robert W. Mulcahy B. Todd Patterson	Registration No. 33,217 Registration No. 29,301 Registration No. 25,610 Registration No. 25,226 Registration No. 28,041 Registration No. 37,165 Registration No. 35,412 Registration No. 25,436 Registration No. 37,906 Registration No. 32,008
Keith M. Tackett Joseph M. Jong	Registration No. 32,008 Registration No. 42,698

Send correspondence to:

Direct telephone calls to:

Patent Counsel Applied Materials, Inc. P.O. Box 450-A Santa Clara, CA 95052

B. Todd Patterson THOMASON, MOSER & PATTERSON

(713) 623-4844

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Ful	name of sole or first	inventor: PEIJUN DING		1.60
. 1	entor's signature:	1703 - 05100	Date:	8/16/77
	idence: t Office Address:	San Jose, California 95129 1020 W. Riverside Way U.S.A.	Country of Citizenship	: PR of China
	I name of second inve	ntor: TONY CHIANG	→ Date:	8/16/99
	entor's signature:	Mountain View, California 94043		
	st Office Address:	100 N. Whisman Road, #17	San Jose, CA 95117	
		U.S.A.	Country of Citizenship	; U.S.A.
Fu	l name of third invent	or: TSE-YONG YAO		
Im	entor's signature:	Truguy of	Date:	3/16/99
	sidence:	San Francisco, California 94107		
	t Office Address:	2080 3rd Street, #10		
	}	U.S.A.	Country of Citizenship	: U.S.A.

Full name of fourth i	nventor:	BARRY CHIN			
Inventor's signature:	Born	1. Min	Dat	te:	8/16/190
Residence:	Saratog	a, California 95070			

13174 Cumberland Drive U.S.A. Post Office Address:

Country of Citizenship: U.S.A.

(Declaration ends with this page)

As a below named inventor, I hereby declare that:

[]

[]

Atty. Dkt. No. AMAT/2859/CALB/COPPER/SB

COMBINED DECLARATION AND POWER OF ATTORNEY

	1	
This	declaration	a is of the following type:
	[X] [] []	original divisional continuation continuation-in-part
		INVENTORSHIP IDENTIFICATION
first	and sole in	post office address and citizenship are as stated below next to my name. I believe I am the original eventor (if only one name is listed below) or an original, first and joint inventor (if plural names and the subject matter which is claimed and for which a patent is sought on the invention entitled:
		IMPROVED BARRIER LAYER FOR ELECTROPLATING PROCESSES
		SPECIFICATION IDENTIFICATION
The	specification	on of which:
	[] [X]	is attached hereto was filed on August 16, 1999, under Serial No. 09/375,167; or

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

_(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, \$1.56,

was described and claimed in PCT International Application No.

filed on and as amended under PCT Article 19 on

Express Mail No. (as Serial No. not yet known)

and was amended on

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue a patent, and

[X] In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR §1.98.

and

B.

Application No: Filing date:

PRIORITY CLAIM (35 U.S.C. §119)

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

[X]	No such a	pplications have been file	i	
[]	Such appl	lications have been filed as	follows:	
		F application(s) filed with as under 35 U.S.C. §119	in 12 mos. (6 mos. for des	sign) prior to this application,
Cou	ntry/PCT	Application No	Date Filed	Priority Claimed
			·	[] Yes [] No [] Yes [] No [] Yes [] No
	reign applic application	ation(s), if any, filed mor	e than 12 mos. (6 mos for	design) prior to this
Count	hv:			

PRIORITY CLAIM (35 U.S.C. §120)

I hereby claim the benefit under Title 35, United States Code, §120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

	No such applications have been Such applications have been			
			Status	
Serial No	o. Filing Date	Patented	Pending .	<u>Abandoned</u>

POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Donald Verplancken	Registration No. 33,217
Michael B. Einschlag	Registration No. 29,301
Peter J. Sgarbossa	Registration No. 25,610
Lawrence Edelman	Registration No. 25,226
Michael L. Sherrard	Registration No. 28,041
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
B. Todd Patterson	Registration No. 37,906
Keith M. Tackett	Registration No. 32,008
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P.O. Box 450-A

THOMASON, MOSER & PATTERSON (713) 623-4844

Santa Clara, CA 95052

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Inventor's signature:		Date:	
Residence: San Jose, California 95129 Post Office Address: 1020 W. Riverside Way U.S.A.		Country of Citizenship: P R of China	
Full name of second in	ventor: TONY CHIANG		
Inventor's signature:		Date:61/29/01	
Residence:	Santa Clara, California 95050	m.	
Post Office Address:	1690 Civic Center Dr., #503 U.S.A.	Country of Citizenship: U.S.A.	
Full name of third inve	entor: TSE-YONG YAO		
Inventor's signature:		Date:	
	3 of	4	

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P.05

Residence:

San Francisco, California 94107

Post Office Address:

2080 3rd Street, #10

U.S.A.

Country of Citizenship: U.S.A.

Full name of fourth inventor:

BARRY CHIN

Inventor's signature:

Saratoga, California 95070

Residence:
Post Office Address:

13174 Cumberland Drive

U.S.A.

Country of Citizenship: U.S.A.

Date:

(Declaration ends with this page)

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POSH OTE: 15vi. (e-v. 6-31) CMC Ha. (651-0011 (ctg. 4/94)	RECORDATION FORM COVER SHEET PATENTS ONLY	U S CARSTERANT OF CONTACTS MATERIAL AND TRANSPER OFFER
To the Hanorable Commissioner of Patents and Trade	marks: Please record the attached original document or copy there	eof.
Date PEIJUN DING 8/16/99 TONY CHIANG 8/16/99	Name and address of receiving pa Name:Applied Materials, Inc Internal Address:P.O. Bo	, a a a a a a a a a a a a a a a a a a a
TSE-YONG YAO 8/16/99 BARRY CHIN 8/16/99		0,00
Additional name(s) of conveying party(ics) attached?	Yes X No Street Address:	J 5
X Assignment Merger	City: Santa Clara	State: CA Zip: 95052
Security Agreement Change	Additional name(s) & address(es) atta	ached? Yes X No
A. Patent Application No.(s) B. Patent No.(s)	application, the execution date of the application is:	(Date of Filing)
, Additional numbers attached? Yes Name and address of party to whom correspondence document should be mailed:		atents involved:
Name: Parent Counsel	7. Total fcc (37 C.F.R. 3.41)	\$_40.00_
Internal Address: APPLIED MATERIALS, INC	Enclosed	
	X Authorized to be charged to de 50 1074/AMAT/2859.C1/CPU	-
Street Address: P.O. Box 450-A	8. Deposit account number	COPPERIFIS
City: Santu Clara State: CA	DO NOT USE THIS SPACE	
Statement and signature. To the best of my knowledge and helief, the foregoing	n information is true and corrections any attached copy is a true c	opy of the original document.
Robert W. Mulcahy Name of Person Signing	Signature	
	Toral number of pages including cover sheet	. adacimients and discument. 3

Mail (locuments to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C., 20231

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J:\rorms\272 (AUGUST 20, 1993)

PERM (SEC). (Rem. G-21)	RECORDATION		recent of limited. pd trademark office
DMO No. 8656+0013 (CD) 4/94)	PAT	ENTS ONLY	
To the Honorable Commissioner of F	Patents and Trademarks: Please record t	he attached original document or copy thereof.	
1. Name of conveying party(ics):		2. Name and address of receiving party(ies):	۲ 1
PEUUN DING TONY CHIANG	<u>Dat≃</u> 8/16/99 8/16/99	Name: Applied Materials, Inc. Internal Address: P.O. Box 450-A	6255 6255
TSE-YONG YAO BARRY CHIN	8/16/99 8/16/99		0 V 0
Additional name(s) of conveying part	y(ics) attached? Yes X No	Street Address:	ic =
3. Nature of conveyance:			
X Assignment	Merger	City: Santa Clara State: CA	2ip:95052
Security Agreement	Change of Name	Additional name(s) & address(es) attached?Yes	X No
Execution Date:	8/16/99		
A. Patent Application No.(s) B. Patent No.(s)		on date of the application is:	(Date of Filing)
A. Patent Application No.(s) B. Patent No.(s) Additional numbers a	mached?Yes <u>X</u> No		
A. Patent Application No.(s) B. Patent No.(s) Additional numbers a	mached?Yes <u>X</u> No	6 Total number of applications and patents involved:	1
A. Patent Application No.(s) B. Patent No.(s) Additional numbers at Additional numbers at Name and address of party to what document should be mailed: Name: Patent Counsel	meorrespondence concerning	6 Total number of applications and patents involved: 7. Total fee (37 C.F.R. 3.41)————————————————————————————————————	11
A. Patent Application No.(s) B. Patent No.(s) Additional numbers a Name and address of party to what document should be mailed:	meorrespondence concerning	6 Total number of applications and patents involved: 7. Total fcc (37 C.F.R. 3.41) Enclosed	1
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A. Patent Application No.(s) B. Patent No.(s) Additional numbers a Name and address of party to who document should be mailed: Name: Patent Counsel Internal Address: APPLIED M	meched?Yes X No mecorrespondence concerning ATERIALS, INC.	6 Total number of applications and patents involved: 7. Total fee (37 C.F.R. 3.41) Enclosed X. Authorized to be charged to deposit account 50 1074/AMAT/2859.C1/CPI/COPPER/PJS 8. Deposit account number:	1
A. Patent Application No.(s) B. Patent No.(s) Additional numbers at Additional numbers at Name and address of party to what document should be mailed: Name: Patent Counsel Internal Address: APPLIED M	meched?Yes X No m correspondence concerning MATERIALS, INC.	6 Total number of applications and patents involved: 7. Total fcc (37 C.F.R. 3.41) Enclosed X. Authorized to be charged to deposit account 50 1074/AMAT/2859.C1/CPI/COPPER/PJS	11
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A. Patent Application No.(s) B. Patent No.(s) Additional numbers at Additional numbers at the second party to what document should be mailed: Name: Patent Counsel Internal Address: APPLIED M Street Address: P.O. Box 450-A City: Santa Clara Streeters and signature.	meched?Yes X No m correspondence concerning MATERIALS, INC. State: CA Zip: 95052	6 Total number of applications and patents involved: 7. Total fee (37 C.F.R. 3.41) Enclosed X Authorized to be charged to deposit account 50 1074/AMAT/2859.C1/CPI/COPPER/PJS 8. Deposit account number: 50-1074/AMAT/2859.C1/CPI/COPPER/PJS	40.00
A. Patent Application No.(s) B. Patent No.(s) Additional numbers at Additional numbers at the second party to what document should be mailed: Name: Patent Counsel Internal Address: APPLIED M Street Address: P.O. Box 450-A City: Santa Clara Streeters and signature.	meched?Yes X No m correspondence concerning MATERIALS, INC. State: CA Zip: 95052	6 Total number of applications and patents involved: 7. Total fee (37 C.F.R. 3.41)————————————————————————————————————	40.00

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

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including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	8/16 1999 Dry	
-	PEIJUN DING	
2)	8/16 , 1999	
	TONY CHIANG	
3)	8/16 1999 Tacque (
	TSE-YONG YAO	
4)	8/16 , 1999 Bang L. Um	
••	BARRY/CHIN	

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IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	8/16 , 1999 Day	
	PEIJUN DING	
2)	8/16 , 1999	
	TONY CHIANG	
3)	1999 Tacque (f TSE-YONG YAO	
	TSE-YONG'YAO	
4)	8/26, 1999 Bang L. Um	
	BARRYCHIN	

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